ABSTRACT OF THE DISCLOSURE

A failure detected network node, which detects a network failure that is assumed to occur at a location in a current communication path through network nodes, is determined. A failure notification time for each network node is then calculated. After that, a first network node is selected from the network nodes, based on the failure notification time. The first network node is positioned in the current communication path on upper stream from the location of the network failure. Finally, an alternative communication path, which includes the first network node and a second network node out of the network nodes, is determined. The second network node is positioned in the current communication path on down stream from the location of the network failure.